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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/688,350

10/16/2000

Tatsuki Kouwa

Q61020

9796

7590

01/27/2005

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EXAMINER

GONZALEZ, JULIO C

ART UNIT

PAPER NUMBER

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DATE MAILED: 01/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.



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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 09/688,350  
Filing Date: October 16, 2000  
Appellant(s): KOUWA ET AL.

**MAILED**

JAN 27 2005

**GROUP 2800**

Terrance J. Wikberg  
Registration No. 47,177  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 10/25/04.

**(1) *Real Party in Interest***

A statement identifying the real party in interest is contained in the brief.

**(2) *Related Appeals and Interferences***

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

**(3) *Status of Claims***

The statement of the status of the claims contained in the brief is incorrect.

A correct statement of the status of the claims is as follows:

Claims 1 and 6 are allowed.

Claims 3 and 5 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

This appeal involves claims 2, 4, 7 and 8.

**(4) *Status of Amendments After Final***

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) *Summary of Invention***

The summary of invention contained in the brief is correct.

**(6) *Issues***

The appellant's statement of the issues in the brief is substantially correct.

The changes are as follows: Claims 1 and 6 are allowed.

**(7) *Claims Appealed***

A substantially correct copy of appealed claims 1, 2, 4 and 6-8 appears on page 3 of the Appendix to the appellant's brief. The minor errors are as follows: Claims 1 and 2 are allowed. Claim 5 is objected.

**(8) *Prior Art of Record***

4,665,354	Sada et al	5-1987
4,642,548	Mashino	2-1987

**(9) *Grounds of Rejection***

The following ground(s) of rejection are applicable to the appealed claims:

***Claim Rejections - 35 USC § 102***

(a) The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(b) Claim 2 is rejected under 35 U.S.C. 102(b) as being anticipated by Sada et al.

Sada et al discloses a voltage control apparatus for a vehicle (see title) having a battery 3, an ignition switch 4, a light emitting element 5 connected in series with the switch 4, a resistor 141 for limiting current flowing through light emitting element 5 (column 6, lines 10-15) and the resistor being disposed between a transistor 140 and input terminal T3 (see figure 1).

***Claim Rejections - 35 USC § 103***

(c) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

(d) Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sada in view of Beyn.

Sada et al discloses a voltage control apparatus for a vehicle (see title) having a battery 3, an ignition switch 4, a light emitting element 5 connected in series with the switch 4, a resistor 141 for limiting current flowing through light emitting element 5 (column 6, lines 10-15) and the resistor being disposed between a transistor 140 and input terminal T3 (see figure 1).

However, Sada et al does not disclose using LED for a light-emitting element.

On the other hand, Beyn discloses for the purpose of providing desirable safe operating conditions for alternator systems, a battery 24, a switch 42, a light emitting diode 46 connected to a current limiting resistor 60 (see figure 1).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design a voltage control apparatus as disclosed by Sada

et al and to modify the invention by using an LED for the purpose of providing desirable safe operating conditions for alternator systems as disclosed by Beyn.

(e) Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sada et al in view of Mashino.

Sada et al discloses a voltage control apparatus for a vehicle (see title) having a battery 3, an ignition switch 4, a light emitting element 5 connected in series with the switch 4, a resistor 141 for limiting current flowing through light emitting element 5 (column 6, lines 10-15) and the resistor being disposed between a transistor 140 and input terminal T3 (see figure 1).

However, Sada et al does not disclose explicitly having a voltage detector circuit.

On the other hand, Mashino discloses for the purpose of providing an inexpensive way of controlling the voltage of a generator and reduce fluctuation of the characteristics of the magnetic circuit of generators, a circuit for detecting the voltage of a control apparatus (see abstract & column 2, lines 19-23, 48-51).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design a voltage control apparatus as disclosed by Sada et al and to use a voltage detection circuit for the purpose of providing an inexpensive

way of controlling the voltage of a generator and reduce fluctuation of the characteristics of the magnetic circuit of generators as disclosed by Mashino.

(f) Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sada et al and Mashino as applied to claim 4 above, and further in view of Beyn.

The combined voltage apparatus discloses all of the elements above. However, the combined voltage apparatus does not disclose using an LED as light emitting element.

On the other hand, Beyn discloses for the purpose of providing desirable safe operating conditions for alternator systems, a battery 24, a switch 42, a light emitting diode 46 connected to a current limiting resistor 60 (see figure 1).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design the combined voltage control apparatus as disclosed by above and to modify the invention by using an LED for the purpose of providing desirable safe operating conditions for alternator systems as disclosed by Beyn.



**(10) Response to Argument**

(a) With respect to claim 2, Sada et al discloses an input terminal T3 for inputting voltage of a battery 3 (column 7, lines 28-32) through an ignition switch 4, a rotor coil 21 of the starter 3 (column 2, lines 46, 47). As disclosed by Sada et al, current flows from the battery through the switch 4, which lights up the lamp 5 and the very same current goes into input T3 (column 7, lines 28-32; column 4, lines 26-29). Moreover, the input terminal T3 affects when the rotor coil 21 is excited (column 4, lines 17-20; 38-40; 46-49; 60-66; column 4, line 67 – column 5, line 5; column 5, lines 47-50; column 8, lines 21-23).

(b) With regards to claim 4, Machino discloses a circuit that detects a voltage at an input terminal, which excites the operation of a generator and such circuit is able to be shutdown (column 2, lines 19-22, 34, 35). Respectfully, the claim is not specific enough to differentiate between the prior art and the present invention since the prior art stills reads on the claims. Also, Machino discloses that the circuit is shutdown (turned off) when the electric power generation is in operation (column 9-24). The circuit disclosed in Mashino inherently detects the voltage at the input IG since the circuitry has to take into account the voltage being discharged, initially, from the battery 7 to the controlling circuit (column 1, line 68 – column 2, line 4).

(c) In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, both references, Sada et al and Mashino et al deal with controlling alternator, specifically for vehicles, which are well known and available to anyone having ordinary skill in the art.

(d) In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

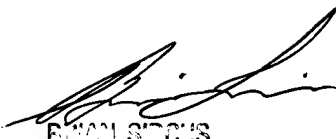
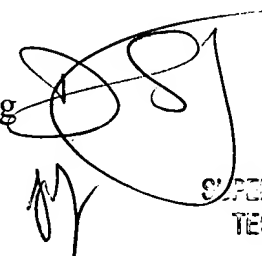
For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Jcg

January 21, 2005

Conferees  
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